

SHIP: USS LASALLE (AGF-3)

ITEM NO: 221-10-001

COAR: 16-537

PCN: EM01-Z009

CMP: NONE

SURVEYOR: GARNER

1. SCOPE:

1.1 Title: Boiler Fuel Oil Burner Assemblies; repair

1.2 Location of Work:

1.2.1 Number One Fire Room (7-96-0-E)

1.3 Identification:

1.3.1 Quantity (4), Number One Boiler Fuel Oil Burner Assemblies, Mfr. Babcock and Wilcox Company, Model Modified 3M Type, Numbers One, 2, 3, and 4

2. REFERENCES:

a. Standard Items

b. Systems and Specifications, Steel Structures Painting Manual, Volume 2

c. S9221-AX-MMO-010/020, Technical Manual Description, Operation and Maintenance Instructions 600 PSI Main Boiler

d. S9086-GY-STM-010/CH-221, Boilers

e. 803-5959293, Typical Arrangement of Fuel Oil Burner Leads for Boilers

3. REQUIREMENTS:

3.1 Prior to disassembly, loosen fuel oil burner piping leads fasteners and inspect for alignment.

3.2 Accomplish the following to each fuel oil burner assembly (including the safety shut-off devices and burner barrels) listed in 1.3:

3.2.1 Disassemble and clean each fuel oil burner assembly.

3.2.1.1 Solvent clean each safety shut-off device and burner barrel. Accomplish the requirements of Surface Preparation Specification SSPC-SP-1 of 2.b.

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3.2.1.2 Commercial blast clean each fuel oil burner assembly (excluding the safety shut-off devices and burner barrels). Accomplish the requirements of Surface Preparation Specification SSPC-SP-6 of 2.b.

3.2.2 Inspect each part for wear and defects, using 2.c for guidance.

3.2.2.1 Submit four legible copies of a report listing results of the requirements of 3.1 and 3.2.2 to the SUPERVISOR.

3.2.3 Lap each burner barrel seating surface to a true surface and install new O-rings in accordance with 2.c.

3.2.4 Accomplish repairs to each safety shut-off device in accordance with 2.c.

3.2.4.1 Install new O-rings, springs, seals and retainer rings.

(V) (G) "HYDROSTATIC TEST"

3.2.5 Hydrostatically test each burner barrel and safety shut-off device at 450 PSIG for a minimum of 20 minutes.

3.2.5.1 Burner barrels test shall be in accordance with Appendix G of 2.d.

3.2.5.2 Safety shut-off device leakage criteria shall be in accordance with paragraph 221-3.1.8 and table 221-3-1 of 2.d.

3.2.6 Straighten each air shutter door, using 2.c for guidance.

3.2.7 Assemble each fuel oil burner assembly installing new set screws, packing, gaskets, bushings, gears, seals, peep hole glasses, insulation and insulation covers.

3.2.8 Align each air door and make adjustments to ensure positive closing of doors and full mesh of gears.

3.2.9 Set the spacing between the inner and outer burner casing in accordance with Plan F-1 of 2.c.

3.3 Accomplish the requirements of 009-12 of 2.a, including Table 2, Column A, Lines One through 7.

3.4 Accomplish the requirements of 009-32 of 2.a for new and disturbed surfaces.

3.5 Install each fuel oil burner assembly in its original location using new mounting fasteners and gaskets in accordance with 2.c and 2.e.

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3.5.1 Ensure freedom of movement and ease of operation after installation by cycling each burner assembly from full open to full close positions.

3.5.2 Set diffuser withdrawal and burner tip nut projection in accordance with 2.c.

3.5.2.1 Fabricate a burner setting gage in accordance with Section F-1 of 2.c.

3.5.2.2 After burner setting is complete, turn the gage over to Ship's Force via the SUPERVISOR.

(V) (G) "OPERATIONAL TEST"

3.6 Test each fuel oil burner assembly under operating conditions. Allowable leakage: None.

3.7 Install new aluminized cloth spray shields on fuel oil piping and valve flanges and components in accordance with ASTM F1138.

4. NOTES:

4.1 None.

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5. GOVERNMENT FURNISHED MATERIAL (GFM):

	<u>QTY</u>	<u>UI</u>	<u>NAME OF PART/ DESCRIPTION</u>	<u>PIECE NO.</u>	<u>REF. NO.</u>	<u>NATIONAL STOCK NO.</u>	<u>PARA NO.</u>
5.1	PUSH MATERIAL:						
1.	None.						
5.2	KITTED MATERIAL:						
1.	None.						
5.3	LLTM:						
1.	14	ea	Gasket Wire Wound 1/2 Inch, 600 PSI Steel		2.c	5330-01-338-7849	3.2
2.	8	ea	Gasket Cover Plate	114	2.c	5330-01-398-0101	3.2
3.	18	ea	Gasket Cap Plug	2	2.c	5330-00-980-5094	3.2
4.	12	ea	Cap Plug Machine Thread	One	2.c	5365-00-582-5099	3.2
5.	12	ea	Ring Retaining	14	2.c	5325-00-357-2086	3.2
6.	12	ea	Ball	46	2.c	5342-01-130-9748	3.2
7.	12	ea	Ring Retaining	5	2.c	5325-00-804-6860	3.2
8.	14	ea	Seal-Flouro Carbon	72	2.c	5330-01-132-4696	3.2
9.	14	ea	Seal Packing	78	2.c	5330-01-132-4697	3.2
10.	12	ea	Ring Retaining	80	2.c	5325-01-133-0943	3.2
11.	12	ea	Seat-Valve Replaceable	81	2.c	4820-01-094-2808	3.2
12.	8	ea	Gasket, Soft Copper 2 Inch OD x 1-43/64 Inch x 4/32 Inch Thk.	2	2.c		3.2
13.	6	ea	Packing Material John Crane Style 810 SP, ASTM-A-322, 1-1/2 Inch Thk. x 1-5/16 Inch Long	29	2.c		3.2

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14.	6	ea	Collar Naval Brass QQ-B-626, COMP 27 2-5/8 Inch Diameter x 3/16 Inch	37	2.c		3.2
15.	6	ea	Sleeve Seal	83	2.c	4530-01-108-7811	3.2
16.	6	ea	Seal	84	2.c	5330-01-130-9719	3.2
17.	50	ft	Packing Material	15	2.c	5330-00-268-9880	3.2
18.	6	ea	Packing Material	43	2.c	5330-01-141-2500	3.2
19.	6	ea	Gasket	58	2.c	5330-01-132-2097	3.2
20.	12	ea	Glass Pyrex Blue Peephole	62	2.c	9340-00-292-3749	3.2
21.	One	ea	Gasket, Poke Hole	68	2.c	5330-01-141-6209	3.2
22.	12	ea	Bushing Sleeve	77	2.c	3120-01-231-3341	3.2
23.	12	ea	Set Screw	48	2.c	5305-00-724-7204	3.2
24.	6	ea	Pinion Bevel Gear	105	2.c	3020-00-891-7654	3.2
25.	6	ea	Gear Helical	106	2.c	3020-01-291-8398	3.2
26.	6	ea	Set Screw	38	2.c	5305-01-113-0936	3.2
27.	6	ea	Spring Helical	30	2.c	5360-01-046-0404	3.2
28.	96	ea	Hex Nut, Cl-C,Steel SF, Mil-B-857, 3/8 Inch x 16 nc-2B, Welding Quality Carbon content not to Exceed 25%	7	2.c		3.2